

METHODS AND APPARATUS FOR COOLING GAS
TURBINE ENGINE COMBUSTORS

ABSTRACT OF THE DISCLOSURE

A method facilitates the operation of a gas turbine engine that includes a combustor including a combustion chamber. The method comprises supplying fuel to the combustion chamber, and directing compressed airflow through a combustor dome assembly that includes a splashplate and a unitarily formed flare cone, such that at least a portion of the compressed airflow is channeled axially downstream through at least one cooling passage defined between the flare cone and the splashplate for cooling of the dome assembly.